



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10

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Seattle, WA 98101-3140

OFFICE OF
ECOSYSTEMS, TRIBAL AND
PUBLIC AFFAIRS

May 14, 2012

Jessie Berner, District Ranger
Powers Ranger District
42861 Highway 242
Powers, Oregon 97466-9700

Re: EPA Region 10 Review of the Eden Ridge Timber Sales Draft Environmental Impact Statement.
EPA Project Number: 10-023-AFS.

Dear Mr. Berner:

The U.S. Environmental Protection Agency (EPA) has reviewed draft Environmental Impact Statement (DEIS) for the Eden Ridge Timber Sales on the Powers Ranger District of the Rogue River-Siskiyou National Forest in Coos County, Oregon. Our review of the DEIS was conducted in accordance with our responsibilities under National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Section 309 specifically directs the EPA to review and comment in writing on the environmental impacts associated with all major federal actions. Under our Section 309 authority, our review of the DEIS considers the expected environmental impacts, and the adequacy of the EIS in meeting procedural and public disclosure requirements of NEPA.

The DEIS analyzes a no action alternative and three action alternatives that would harvest timber through variable density thinning and conduct connected activities on approximately 3,314 acres. This harvest could contribute approximately 50 million board feet (mmbf) of timber over five years. Additionally, the action alternatives would selectively treat the planning area for two forest pathogens: Port-Orford-Cedar root disease (*Phytophthora lateralis*) and laminated root rot (*Phellinus weirii*). Alternative 2 is the proposed action, and it represents the maximum extent of proposed treatments and connected actions. Connected actions include approximately 10.5 miles of new system road construction, 12 miles of reconstruction and /or maintenance, and the use of approximately 31 miles of existing system roads. Alternative 3 seeks to include only "high-moderate benefit/low risk" new roads, and Alternative 4 includes only the use of existing roads.

Overall the DEIS is thorough and well written. We appreciate the attention given to the issue of roads, particularly given the presence of *Phytophthora lateralis* and 303(d) listed water bodies. In our attached detailed comments, we recommend that the Forest incorporate elements of Alternative 3 into the final preferred alternative, particularly within the Coal Creek drainage. Risk of adverse cumulative watershed effects in the Coal Creek subwatershed is currently high due to its degraded condition, and risk of measurable impact should be avoided to the maximum extent practicable. We also recommend minor revisions to assumptions about the width of the primary shade zone based on site potential tree height. Lastly we recommend the inclusion of additional information related to mitigation for road construction, removal and rehabilitation.

Finally, we note that this project appears to adhere to many of the principles of Ecological Forestry as articulated by Franklin et al. (2007)¹ and Johnson and Franklin (2009)². As you are likely aware, the Bureau of Land Management is in the process of developing and implementing three "pilot projects" to demonstrate the principles of Ecological Forestry in southwest Oregon. Because the scope and scale of Eden Ridge is greater than the proposed BLM pilot projects, and because it considers treatment within riparian areas, we encourage you to work with the BLM as you establish your monitoring framework so that Eden Ridge might serve as a collective learning opportunity.

Due to our concerns over roading and potential water quality impacts, we have rated the proposed alternative EC-2 (Environmental Concerns – Insufficient Information). The attached comments provide specifics, recommendations, and an explanation of this rating. We appreciate the opportunity to provide comments, you may contact me with any questions at (206) 553-1601 or by electronic mail at reichgott.christine@epa.gov, or you may contact Teresa Kubo of my staff at (503) 326-2859 or kubo.teresa@epa.gov.

Sincerely,



Christine B. Reichgott, Manager
Environmental Review and Sediment Management Unit

¹ Franklin, Jerry F., Mitchell, Robert J., and Brian J. Palik. 2007. Natural Disturbance and Stand Development Principles for Ecological Forestry. USDA Forest Service Northern Research Station. General Technical Report NRS-19.

² Johnson, K. Norman and Jerry F. Franklin. 2009. Restoration of Federal Forests in the Pacific Northwest: Strategies and Management Implications. Available at: <http://courses.washington.edu/esrm425/pdf/JohnsonExecutiveSummary.pdf>

**EPA Region 10 Detailed Comments on
Eden Ridge Timber Sales
Draft Environmental Impact Statement
May 14, 2012**

Road Impacts

The DEIS provides a thorough analysis of potential impacts associated with road construction and reconstruction, and we appreciate the inclusion of the Hydrology Report in Appendix C. As noted on page C-37, the risk of adverse cumulative watershed effects in the Coal Creek subwatershed is currently high due to the degraded condition of the channel. Further, there are certain units (identified in Table C-14) that present more risk of measurable impact than the rest of the project. Of the units identified within C-14, we are particularly interested in units 303, 307, 308, and 309 because of the ground-based harvest prescription and the need to construct a road. Unit 303 does not include any riparian harvest, but is located in proximity to Coal Creek, and represents only 12 acres. Units 307, 308 and 309 together represent 51 acres. Of these, 32 (or 63%) are in within the Riparian Reserve land use allocation. We appreciate that treatment within the Riparian Reserve would only be undertaken to achieve the objectives of the Aquatic Conservation Strategy, but we are not convinced that the potential benefits to riparian habitat outweigh the potential risk to water quality and aquatic resources. Given the extent of riparian acreage within these units, the limited number of matrix acres, and the overall risk of adverse watershed effects within the Coal Creek watershed, we make the following recommendations:

Recommendation:

- We recommend that units 303, 307, 308 and 309 be either dropped, or pursued consistent with the approach put forward under Alternative 3.

Primary Shade Zone Determination

As noted on page III-25 of the DEIS, the Oregon Department of Environmental Quality (ODEQ) and its partners prepared a Total Maximum Daily Load (TMDL) and Water Quality Management Plan (WQMP) for the Upper South Fork Coquille in 2001. That assessment addressed temperature exceedances in impaired streams and concluded that "no thermal loads are available for allocation to anthropogenic sources in this system." The DEIS recognizes that for the purposes of the Planning Area, that means that any increases in stream water temperature resulting from land management activities would be a violation of state water quality standards. The DEIS proposes to guard against temperature increases associated with solar loading by avoiding harvest in the primary shade zone. This zone is defined for perennial streams in Table II-11 as follows:

	Hill Slope <30%	Hill Slope 30% to 60%	Hill Slope >60%
Primary Shade Zone Width (slope distance)	50 ft.	55 ft.	60 ft.

This table was derived principally from the 2005 Northwest Forest Plan Temperature TMDL Implementation Strategy³. In 2011, that strategy document was revised in order to give a more thorough accounting of primary shade zones as follows:

Table 4 of the Updated TMDL Strategy⁴: Width of Primary Shade Zone (feet) based on Slope (percent) and Tree Height (average height of stand in feet)

	Hill Slope <30%	Hill Slope 30% to 60%	Hill Slope >60%
Trees < 20 feet	12	14	15
Trees 20 to 60 feet	28	33	55
Trees >60 to 100 feet	50	55	60
Trees >100 to 140 feet	70	75	85

We expect that trees within the Eden Ridge planning area would fall into the category of “Trees >100 to 140 feet.” If that is accurate, we recommend that the EIS assumptions related to the primary shade zone be revised accordingly.

Recommendation:

- In order to support TMDL implementation, we recommend that the primary shade zone widths in the EIS be revised from those in Table II-11 in the DEIS (i.e. 50 to 60 feet depending on hill slope) to those in Table 4 of the Updated TMDL Strategy (i.e. 70 to 85 feet depending on hill slope).

Mitigation

As noted above, the EPA is recommending that the units bordering the main channel of Coal Creek (307, 308 and 309) be dropped or accessed without roads. Should the Forest decide to access these units as proposed under Alternative 2, we are concerned that the mitigating measures for these units are not adequately described. Page III-19 of the DEIS notes that sediment and runoff generated by road construction on units 303, 307, 308 and 309 could reach Coal Creek. To mitigate for this potential effect the DEIS proposes the following:

“Sediment transport would be monitored by the sale administrator. Any visible sediment input to Coal Creek originating from these units would require implementation of mitigating measures that would capture/prevent sediment transport recommended by a soil scientist, hydrologist, or engineer.”

While this proposed measure provides an avenue to mitigation, it is not in and of itself adequate mitigation. To be adequate and effective, mitigation measures should avoid, minimize, rectify, reduce, or compensate for an impact. As stated, the measure above would serve to identify the impact.

³ Northwest Forest Plan Temperature TMDL Implementation Strategies – Evaluation of the Northwest Forest Plan Aquatic Conservation Strategy and Associated Tools to achieve and maintain stream temperature water quality standards. USFS and BLM. September 5, 2005

⁴ Northwest Forest Plan Temperature TMDL Implementation Strategies – Evaluation of the Northwest Forest Plan Aquatic Conservation Strategy and Associated Tools to achieve and maintain stream temperature water quality standards. USFS and BLM. Update of September 5, 2005 DEQ Conditionally Approved Version November 15, 2010

Recommendation:

- If the Forest proceeds with Alternative 2 we recommend that the mitigation measures on page III-19 be expanded to include information about specific tangible actions that would be taken to mitigate for road runoff.

Ecological Forestry

We support the proposed use of variable density thinning (VDT) and we note that this project appears to adhere to many of the principles of Ecological Forestry as articulated by Franklin et al. (2007)⁵ and Johnson and Franklin (2009)⁶. As you are likely aware, the Bureau of Land Management is in the process of developing and implementing three “pilot projects” to demonstrate the principles of Ecological Forestry in southwest Oregon. Because the scope and scale of Eden Ridge is greater than the proposed BLM pilot projects, and because it considers treatment within riparian areas (which the BLM projects largely do not), we encourage you to work with the BLM as you establish your monitoring framework so that Eden Ridge might serve as a collective learning opportunity.

⁵ Franklin, Jerry F., Mitchell, Robert J., and Brian J. Palik. 2007. Natural Disturbance and Stand Development Principles for Ecological Forestry. USDA Forest Service Northern Research Station. General Technical Report NRS-19.

⁶ Johnson, K. Norman and Jerry F. Franklin. 2009. Restoration of Federal Forests in the Pacific Northwest: Strategies and Management Implications. Available at: <http://courses.washington.edu/esrm425/pdf/JohnsonExecutiveSummary.pdf>

**U.S. Environmental Protection Agency Rating System for
Draft Environmental Impact Statements
Definitions and Follow-Up Action***

Environmental Impact of the Action

LO – Lack of Objections

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC – Environmental Concerns

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO – Environmental Objections

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU – Environmentally Unsatisfactory

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 – Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 – Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 – Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.